Wildlife in the Winlaw Watershed

MAMMALS

Big animals need big ranges. Deer, moose and elk move back and forth from Perry Siding to Winlaw, up that drainage, then over the high passes into the Sproule and Grohman valleys. Or north to Trozzo and South Lemon, just a short distance along the high ridges. The whole of Winlaws's SW-facing slopes where the fir/ Ponderosa forest is relatively open is criss-crossed with game trails. This is wintering range for ungulates – adequate cover to shelter from snow, and plenty of deciduous browse. (false box, snowberry, rose, Douglas maple, alder and willow) Moose enjoy Paradise Valley along Dumont Creek when the ponds are full and the small meadow is lush.

Winlaw's NE-facing slopes are steep, cut by numerous deep tributary gullies, and thickly forested with cedar/hemlock. No large animal trails here, though it's a paradise for many species of birds and small mammals. The ridgetop offers connection to Rockslide and Donut lakes, the Pedro drainage, and Slocan Ridge.

Bears (black and grizzly) share the ungulate trails as they follow spring greens and summer berries. Coyotes, bobcats and cougar follow small and large prey, including grouse, snowshoe hares, and the multitude of mice, voles, shrews, and squirrels. There is evidence of bears denning in the higher reaches.

For wild creatures to thrive they need water, food, shelter, and respite from the disturbances of humans. All this the watershed provides, but it is **the connection between diverse habitats** that is most important of all. Small animals may spend all their lives in a limited area, but large ones need <u>all</u> of nature's pantry, from river valley bottom to mountain ridges to be able to survive the seasonal changes.

The Old Silica Mine Rd. (now the Winlaw Forest Service Rd.) is well-used as a game trail. It is not the existence of a road per se that disturbs wildlife and fragments their habitat, but rather **the human traffic on it.** Human access to the FSR is somewhat controlled by a gate at the bottom. If we put in more roads, for timber harvest and/or access for fire fighting, we need to consider the impact of access. When people say they want more 'back country' access, they usually mean access for motorized transport. Do we really have the right to drive <u>everywhere?</u> Older hunters and trappers regularly 'accessed' our back country – they walked.

FISH

Before the damming of the Columbia River, salmon returned annually to the Slocan River. This enormous influx of nutrients supported many other fish and aquatic life, including rainbow trout. Some of these would have travelled up Winlaw Creek for respite from summer heat, and to spawn.

Even before the building of the dams, local settler activities disrupted Winlaw's fish habitat. The lower reach was completely diverted into it's present day channel, and the creek had to flow through a culvert under the rail bed. Culverts are notorious barriers to fish migration. The building of Highway #6 added an even larger culvert.

In the 1990s, the WWC undertook some studies to determine if there were still any fish in the creek, and what might be done to improve habitat for them. Rainbow trout and sculpins were

found all the way up to the waterfall, about 4 km from the creek mouth. The trout ranged in size from tiny to 219 mm., and in age from new hatches to 3 years of age.

Recommendations for habitat improvement included methods for creation of deeper pools, possible off-channel refugia, and ways to lessen the drop at the highway culvert outflow. Meanwhile, our observations of the creek through the Slocan Valley Water Monitoring Program showed that the quantity of gravel and cobbles transported by the creek is enormous. (In one year, a lovely small island bordered by 2 deep channels was transformed into bank-to-bank shallow gravel riffle.) It seemed any pools we might create would be short-lived. (The reports also noted that the whole creek is deficient in LWD (large woody debris) embedded in the banks, perhaps due to early logging and the 1912 fire. Such structures allow undercutting of the bank with resulting shaded pools.)

We did address the drop below the culvert, and remove various barriers upstream of the highway. (The whole report with photos can be read at Winlaw Creek Fish Habitat Restoration Project annual Report 1999.)

BENTHIC INVERTEBRATES

These are the tiny but important creatures that live in the creekbed. Many of them are the larvae of insects that we recognize once they reach their adult form – dragonflies, stoneflies, mayflies, caddisflies. Both larvae and adult insects are important food sources for fish, amphibians, bats and birds.

These creatures spend most of their lives (sometimes several years) in the gravels of the streambed before emerging as winged adults to mate. While in the stream, their feeding habits help to keep the water clean – they include scrapers, shredders, collectors and predators.

The presence or absence of these creatures, their diversity, abundance and type, is a good indicator of water quality, as some are more tolerant of pollution than others. Abundance of the EPT triumvirate – Ephemeroptera(mayflies), Plecoptera (stoneflies) and Trichoptera (caddisflies) means the water is generally clear and not impacted by by high levels of deposited sediment.

Winlaw Creek was included in the 1998 and 1999 Slocan River Watershed Benthic Macroinvertebrate Assessments, as were three other large creeks: Airy, Lemon and Bonanza. Of the four, Winlaw had the most diverse assemblages of feeding groups, and the highest abundances of macroinvertebrates overall.